



## FEP Fluoroplastic resin

Version 8.0

Revision Date 22.05.2013

Ref. 150000002330

This SDS adheres to the standards and regulatory requirements of Great Britain and may not meet the regulatory requirements in other countries.

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name : FEP Fluoroplastic resin

Types : 100, 100 X, 100-J, 100-N, 106-N, 130-J, 140-J, 160-N, 5100-J, 9494-J, 6100, 6100-J, 106 X  
G1, G3, G7, CJ95, CJ99, CJ 95 X, CJ 99 X, 9302 X,  
FPD 9852, FPD9848, FPD9849  
TE9298, TE9290, TE9302-N, TE9469, TE9475, 9475 X, TE9486, TE9491,  
TE9494, 9494 X, TE9495, 9495 X, TE9497,  
TE9808, TE9817, TE9818, TE9820, TE9821, TE9823, TE9824, TE9828,  
TE9831, TE9832, TE9835, 9835 X, TE9837, TE9838, TE9839, TE9845,  
TE9846

Synonyms : Poly(Hexafluoropropene/Tetrafluoroethylene)

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture Resin for moulding and/or extrusion

#### 1.3. Details of the supplier of the safety data sheet

Company : Du Pont de Nemours (Nederland) B.V.  
Baanhoekweg 22  
NL-3313 LA Dordrecht  
Netherlands

Telephone : +31-(0)-78-630-1011

Telefax : +31-(0)-78-630-1181

E-mail address : sds-support@che.dupont.com

#### 1.4. Emergency telephone number

Emergency telephone number : +44 (0) 8456 006 640

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

#### 2.2. Label elements

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.



**FEP Fluoroplastic resin**

Version 8.0

Revision Date 22.05.2013

Ref. 150000002330

**2.3. Other hazards**

The thermal decomposition vapours of fluorinated plastics may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco.

**SECTION 3: Composition/information on ingredients**

**3.1. Substances**

Registration number	Classification according to Directive 67/548/EEC	Classification according to Regulation (EU) 1272/2008 (CLP)	Concentration
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**Poly(Hexafluoropropene/Tetrafluoroethylene) (CAS-No.25067-11-2)**

			100 %
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**3.2. Mixtures**

not applicable

The above products are REACH compliant; Registration number(s) may not be provided because substance(s) are exempted, not yet registered under REACH or are registered under another regulatory process (biocide uses, plant protection products), etc.

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

- General advice : No hazards which require special first aid measures. Never give anything by mouth to an unconscious person. When symptoms persist or in all cases of doubt seek medical advice.
- Inhalation : Remove from exposure, lie down. Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. Consult a physician.
- Skin contact : Do not peel polymer from the skin. Cool skin rapidly with cold water after contact with molten material. Wash off with soap and water. Consult a physician.
- Eye contact : Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.
- Ingestion : Not a probable route of exposure. However, in case of accidental ingestion, call a physician.

**4.2. Most important symptoms and effects, both acute and delayed**

- Symptoms : Polymer fume fever

**4.3. Indication of any immediate medical attention and special treatment needed**

- Treatment : Treat symptomatically.



## **FEP Fluoroplastic resin**

Version 8.0

Revision Date 22.05.2013

Ref. 15000002330

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

Suitable extinguishing media : Carbon dioxide (CO<sub>2</sub>), Dry powder, Foam, Water

#### **5.2. Special hazards arising from the substance or mixture**

Specific hazards during firefighting : Hazardous thermal decomposition products:  
: Carbon oxides  
: acid fluorides  
: Fluorinated compounds  
: Hydrogen fluoride  
: Carbonyl fluoride  
: Exposure to decomposition products may be a hazard to health.

#### **5.3. Advice for firefighters**

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Wear suitable protective equipment. Wear neoprene gloves during cleaning up work after a fire.

Further information : Protect from hydrogen fluoride fumes which react with water to form hydrofluoric acid.  
: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Difficult to ignite, and flame goes out when initiating source is removed.

### **SECTION 6: Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions : Ventilate the area. Refer to protective measures listed in sections 7 and 8. Material can create slippery conditions.

#### **6.2. Environmental precautions**

Environmental precautions : No special environmental precautions required.

#### **6.3. Methods and materials for containment and cleaning up**

Methods for cleaning up : Sweep up and shovel into suitable containers for disposal. Clean contaminated floors and objects thoroughly while observing environmental regulations.

#### **6.4. Reference to other sections**

For disposal instructions see section 13.

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**



**FEP Fluoroplastic resin**

Version 8.0

Revision Date 22.05.2013

Ref. 150000002330

Advice on safe handling : For personal protection see section 8. When opening containers, avoid breathing vapours that may be emanating. Avoid breathing dust. Avoid contamination of cigarettes or tobacco with dust from this material. General precaution for all plastics and elastomers: Provide appropriate exhaust ventilation at dryers, machinery and at places where dust or volatiles can be generated. In case of insufficient ventilation, wear suitable respiratory equipment.

Advice on protection against fire and explosion : Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).

**7.2. Conditions for safe storage, including any incompatibilities**

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Protect from contamination.

Advice on common storage : No special restrictions on storage with other products. Keep away from tobacco products. For further information see Section 10 of the safety data sheet.

Other data : Stable under recommended storage conditions.

**7.3. Specific end use(s)**

no data available

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

If sub-section is empty then no values are applicable.

**8.2. Exposure controls**

Engineering measures : Ensure adequate ventilation, especially in confined areas. Good general ventilation should be provided to keep dust concentrations below the exposure limits. Local exhaust ventilation should be employed to minimize airborne contamination.

Eye protection : Safety glasses with side-shields conforming to EN166

Hand protection : When handling hot material, use heat resistant gloves. Protective gloves (Type : Kevlar® - heat resistant, use possible until worn out)

Skin and body protection : If there is a potential for contact with hot/molten material wear heat resistant clothing and footwear.

Hygiene measures : Regular cleaning of equipment, work area and clothing. Wash hands and face before breaks and immediately after handling the product. Do not contaminate tobacco products. General precaution for all plastics and elastomers: Do not breathe fumes evolved from hot polymer.



## FEP Fluoroplastic resin

Version 8.0

Revision Date 22.05.2013

Ref. 150000002330

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Suitable respiratory equipment: Half mask with a particle filter FFP2/FFP3 (EN149)

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Form : pellets

Colour : white, translucent

Odour : none

Melting point/range : 257 - 263 °C

Flash point : Difficult to ignite, and flame goes out when initiating source is removed.

Ignition temperature : 530 - 550 °C

Lower explosion limit/ lower flammability limit : not applicable

Upper explosion limit/ upper flammability limit : not applicable

Density : 2.1 - 2.2 g/cm<sup>3</sup>

Water solubility : insoluble

#### 9.2. Other information

no data available

### SECTION 10: Stability and reactivity

**10.1. Reactivity** : No decomposition if stored and applied as directed.

**10.2. Chemical stability** : The product is chemically stable under recommended conditions of storage, use and temperature.

**10.3. Possibility of hazardous reactions** : During drying, cleaning and moulding, small amounts of hazardous gases and/or particulate matter may be released. These may irritate eyes, nose and throat. Large molten masses may give off hazardous gases. Stable under normal conditions.

**10.4. Conditions to avoid** : To avoid thermal decomposition, do not overheat. Abnormally long processing time or high temperatures can produce irritating and toxic fumes. Stable under normal conditions.

**10.5. Incompatible materials** : Powdered metals  
Finely divided aluminium



## FEP Fluoroplastic resin

Version 8.0

Revision Date 22.05.2013

Ref. 15000002330

- potent oxidizers like fluorine (F<sub>2</sub>)  
and  
related compounds
- : Contact with incompatible materials can cause fire and explosion.
- 10.6. Hazardous decomposition products** : Hazardous thermal decomposition products may include:  
Hydrogen fluoride  
Carbonyl fluoride  
perfluoroisobutylene  
acid fluorides  
Carbon oxides  
Fluorinated compounds

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute inhalation toxicity

The thermal decomposition vapours of fluorinated plastics may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco.

- Poly(Hexafluoropropene/Tetrafluoroethylene)

LC50 / 4 h rat : > 8 mg/l

The thermal decomposition vapours of fluorinated plastics may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco.

##### Repeated dose toxicity

- Poly(Hexafluoropropene/Tetrafluoroethylene)

Oral rat

No toxicologically significant effects were found.

Inhalation rat

No toxicologically significant effects were found.

### SECTION 12: Ecological information

#### 12.1. Toxicity

##### Toxicity to fish

- Poly(Hexafluoropropene/Tetrafluoroethylene)

The substance is a polymer and is not expected to produce toxic effects.

#### 12.2. Persistence and degradability

no data available

#### 12.3. Bioaccumulative potential

no data available



## FEP Fluoroplastic resin

Version 8.0

Revision Date 22.05.2013

Ref. 150000002330

### 12.4. Mobility in soil

no data available

### 12.5. Results of PBT and vPvB assessment

no data available

### 12.6. Other adverse effects

#### Additional ecological information

This product has no known ecotoxicological effects.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product : Like most thermoplastic plastics the product can be recycled. If recycling is not practicable, dispose of in compliance with local regulations. Incinerate only if incinerator is capable of scrubbing out hydrogen fluoride and other acidic combustion products.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

## SECTION 14: Transport information

### ADR

- 14.1. UN number: not applicable
- 14.2. UN proper shipping name: not applicable
- 14.3. Transport hazard class(es): not applicable
- 14.4. Packing group: not applicable
- 14.5. Environmental hazards: none
- 14.6. Special precautions for user:  
Not classified as dangerous in the meaning of transport regulations.

### IATA\_C

- 14.1. UN number: not applicable
- 14.2. UN proper shipping name: not applicable
- 14.3. Transport hazard class(es): not applicable
- 14.4. Packing group: not applicable
- 14.5. Environmental hazards: none
- 14.6. Special precautions for user:  
Not classified as dangerous in the meaning of transport regulations.

### IMDG

- 14.1. UN number: not applicable
- 14.2. UN proper shipping name: not applicable
- 14.3. Transport hazard class(es): not applicable
- 14.4. Packing group: not applicable
- 14.5. Environmental hazards: none
- 14.6. Special precautions for user:  
Not classified as dangerous in the meaning of transport regulations.

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code



**FEP Fluoroplastic resin**

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not applicable

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Other regulations : Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

**15.2. Chemical Safety Assessment**

A Chemical Safety Assessment is not required for this substance.

**SECTION 16: Other information**

**Restrictions on use**

Do not use DuPont materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract that is consistent with DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont representative. You may also request a copy of the DuPont POLICY Regarding Medical Applications H-50103-3 and DuPont CAUTION Regarding Medical Applications H-50102-3.

**Further information**

The DuPont Oval Logo is a registered trademark of E.I. du Pont de Nemours and Company. Before use also read the following bulletin(s):, Guide for the Safe Handling of Fluoropolymer Resins published by PlasticsEurope., For further information contact the local DuPont office or DuPont's nominated distributors.

Significant change from previous version is denoted with a double bar.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.